

§ 52.1396

40 CFR Ch. I (7–1–14 Edition)

when developing, issuing, or conditioning permits and when making dispersion forecast recommendations through the implementation of Title 17, Chapter 8, subchapter 6, ARM, Open Burning.

[77 FR 57915, Sept. 18, 2012]

§ 52.1396 Federal implementation plan for regional haze.

(a) *Applicability.* This section applies to each owner and operator of the following coal fired electric generating units (EGUs) in the State of Montana: PPL Montana, LLC, Colstrip Power Plant, Units 1, 2; and PPL Montana, LLC, JE Corette Steam Electric Station. This section also applies to each owner and operator of cement kilns at the following cement production plants: Ash Grove Cement, Montana City Plant; and Holcim (US) Inc. Cement, Trident Plant. This section also applies to each owner or operator of Blaine County #1 Compressor Station. This section also applies to each owner and operator of CFAC and M2 Green Redevelopment LLC, Missoula site.

(b) *Definitions.* Terms not defined below shall have the meaning given them in the Clean Air Act or EPA's regulations implementing the Clean Air Act. For purposes of this section:

Boiler operating day means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the EGU.

It is not necessary for fuel to be combusted for the entire 24-hour period.

Continuous emission monitoring system or CEMS means the equipment required by this section to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system (DAHS)), a permanent record of SO₂ or NO_x emissions, other pollutant emissions, diluent, or stack gas volumetric flow rate.

Kiln operating day means a 24-hour period between 12 midnight and the following midnight during which the kiln operates.

NO_x means nitrogen oxides.

Owner/operator means any person who owns or who operates, controls, or supervises an EGU identified in paragraph (a) of this section.

PM means filterable total particulate matter.

SO₂ means sulfur dioxide.

Unit means any of the EGUs or cement kilns identified in paragraph (a) of this section.

(c) *Emissions limitations.* (1) The owners/operators of EGUs subject to this section shall not emit or cause to be emitted PM, SO₂ or NO_x in excess of the following limitations, in pounds per million British thermal units (lb/MMBtu), averaged over a rolling 30-day period for SO₂ and NO_x:

Source name	PM emission limit (lb/MMBtu)	SO ₂ emission limit (lb/MMBtu)	NO _x emission limit (lb/MMBtu)
Colstrip Unit 1	0.10	0.08	0.15
Colstrip Unit 2	0.10	0.08	0.15
JE Corette Unit 1	0.26	0.57	0.35

(2) The owners/operators of cement kilns subject to this section shall not emit or cause to be emitted PM, SO₂ or NO_x in excess of the following limita-

tions, in pounds per ton of clinker produced, averaged over a rolling 30-day period for SO₂ and NO_x:

Source name	PM emission limit	SO ₂ emission limit (lb/ton clinker)	NO _x emission limit (lb/ton clinker)
Ash Grove Cement	If the process weight rate of the kiln is less than or equal to 30 tons per hour, then the emission limit shall be calculated using $E = 4.10p^{0.67}$ where E = rate of emission in pounds per hour and p = process weight rate in tons per hour; however, if the process weight rate of the kiln is greater than 30 tons per hour, then the emission limit shall be calculated using $E = 55.0p^{0.11} - 40$, where E = rate of emission in pounds per hour and P = process weight rate in tons per hour.	11.5	8.0
Holcim (US) Inc	0.77 lb/ton clinker	1.3	6.5

(3) The owners/operators of LP, Blaine County #1 Compressor Station shall not emit or cause to be emitted from each 5,500 horsepower Ingersoll Rand 616 natural gas-fired compressor engine installed at the facility total NO_x in excess of 21.8 lbs/hr (average of three stack test runs).

(4) These emission limitations shall apply at all times, including startups, shutdowns, emergencies, and malfunctions.

(d) *Compliance date.* The owners and operators of Blaine County #1 Compressor Station shall comply with the emissions limitation and other requirements of this section as expeditiously as practicable, but no later than July 31, 2018. The owners and operators of the BART sources subject to this section shall comply with the emissions limitations and other requirements of this section as follows, unless otherwise indicated in specific paragraphs: Compliance with PM limits is required within 30 days of the effective date of this rule. Compliance with SO₂ and NO_x limits is required within 180 days of the effective date of this rule, unless installation of additional emission controls is necessary to comply with emission limitations under this rule, in which case compliance is required within five years of the effective date of this rule.

(e) *Compliance determinations for SO₂ and NO_x(1) CEMS for EGUs.* At all times after the compliance date specified in paragraph (d) of this section, the owner/operator of each unit shall maintain, calibrate, and operate a CEMS, in full compliance with the requirements found at 40 CFR part 75, to accurately measure SO₂, NO_x, diluent, and stack gas volumetric flow rate from each unit. The CEMS shall be used by the

owner/operator to determine compliance with the emission limitations in paragraph (c) of this section for each unit.

(2) *Method for EGUs.* (i) For any hour in which fuel is combusted in a unit, the owner/operator of each unit shall calculate the hourly average SO₂ and NO_x concentration in lb/MMBtu at the CEMS in accordance with the requirements of 40 CFR part 75. At the end of each boiler operating day, the owner/operator shall calculate and record a new 30-day rolling average emission rate in lb/MMBtu from the arithmetic average of all valid hourly emission rates from the CEMS for the current boiler operating day and the previous 29 successive boiler operating days.

(ii) An hourly average SO₂ or NO_x emission rate in lb/MMBtu is valid only if the minimum number of data points, as specified in 40 CFR part 75, is acquired by the owner/operator for both the pollutant concentration monitor (SO₂ or NO_x) and the diluent monitor (O₂ or CO₂).

(iii) Data reported by the owner/operator to meet the requirements of this section shall not include data substituted using the missing data substitution procedures of subpart D of 40 CFR part 75, nor shall the data have been bias adjusted according to the procedures of 40 CFR part 75.

(3) *CEMS for cement kilns.* At all times after the compliance date specified in paragraph (d) of this section, the owner/operator of each unit shall maintain, calibrate, and operate a CEMS, in full compliance with the requirements found at 40 CFR 60.63(f) and (g), to accurately measure concentration by volume of SO₂ and NO_x emissions into the atmosphere from each unit. The CEMS shall be used by the owner/operator to

determine compliance with the emission limitations in paragraph (c) of this section for each unit, in combination with data on actual clinker production. The owner/operator must operate the monitoring system and collect data at all required intervals at all times the affected unit is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

(4) *Method for cement kilns.* (i) The owner/operator of each unit shall record the daily clinker production rates.

(ii) The owner/operator of each unit shall calculate and record the 30-operating day rolling emission rates of SO₂ and NO_x, in lb/ton of clinker produced, as the total of all hourly emissions data for the cement kiln in the preceding 30 days, divided by the total tons of clinker produced in that kiln during the same 30-day operating period, using the following equation:

$$E_D = k \frac{1}{(n)} \sum_{i=1}^n C_i Q_i / P_i$$

Where:

E_D = 30 kiln operating day average emission rate of NO_x or SO₂, lb/ton of clinker;

C_i = Concentration of NO_x or SO₂ for hour i, ppm;

Q_i = volumetric flow rate of effluent gas for hour i, where

C_i and Q_i are on the same basis (either wet or dry), scf/hr;

P_i = total kiln clinker produced during production hour i, ton/hr;

k = conversion factor, 1.194 × 10⁻⁷ for NO_x and 1.660 × 10⁻⁷ for SO₂; and

n = number of kiln operating hours over 30 kiln operating days, n = 1 to 720.

For each kiln operating hour for which the owner/operator does not have at least one valid 15-minute CEMS data value, the owner/operator must use the average emissions rate (lb/hr) from the most recent previous hour for which valid data are available. Hourly clinker production shall be determined by the owner/operator in accordance with the requirements found at 40 CFR 60.63(b).

(iii) At the end of each kiln operating day, the owner/operator of each unit shall calculate and record a new 30-day rolling average emission rate in lb/ton clinker from the arithmetic average of all valid hourly emission rates for the current kiln operating day and the previous 29 successive kiln operating days.

(5) *Method for compressor station.* The owner/operator of Blaine County #1

Compressor Station shall install a temperature-sensing device (i.e. thermocouple or resistance temperature detectors) before the catalyst in order to monitor the inlet temperatures of the catalyst for each engine. The owner/operator shall maintain the exhaust temperature at the inlet to the catalyst for each engine at a minimum of least 750 °F and no more than 1250 °F in accordance with the catalyst manufacturer's specifications. Also, the owner/operator shall install gauges before and after the catalyst for each engine in order to monitor pressure drop across the catalyst. During the initial performance test the owner/operator maintain the pressure drop within ±2" water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured. The owner/operator shall follow the manufacturer's recommended maintenance schedule and procedures for each engine and its respective catalyst. The owner/operator shall only fire each engine with natural gas that is of pipeline-quality in all respects except that the CO₂ concentration in the gas shall not be required to be within pipeline-quality.

(f) *Compliance determinations for particulate matter.*

(1) *EGU particulate matter BART limits.* Compliance with the particulate matter BART emission limits for each EGU

BART unit shall be determined by the owner/operator from annual performance stack tests. Within 60 days of the compliance deadline specified in paragraph (d) of this section, and on at least an annual basis thereafter, the owner/operator of each unit shall conduct a stack test on each unit to measure particulate emissions using EPA Method 5, 5B, 5D, or 17, as appropriate, in 40 CFR part 60, Appendix A. A test shall consist of three runs, with each run at least 120 minutes in duration and each run collecting a minimum sample of 60 dry standard cubic feet. Results shall be reported by the owner/operator in lb/MMBtu. The results from a stack test meeting the requirements of this paragraph that were completed within 120 days prior to the compliance date can be used by the owner/operator in lieu of the first stack test required. In addition to annual stack tests, owner/operator shall monitor particulate emissions for compliance with the BART emission limits in accordance with the applicable Compliance Assurance Monitoring (CAM) plan developed and approved in accordance with 40 CFR part 64.

(2) *Cement kiln particulate matter BART limits.* Compliance with the particulate matter BART emission limits for each cement kiln shall be determined by the owner/operator from annual performance stack tests. Within 60 days of the compliance deadline specified in paragraph (d) of this section, and on at least an annual basis thereafter, the owner/operator of each unit shall conduct a stack test on each unit to measure particulate matter emissions using EPA Method 5, 5B, 5D, or 17, as appropriate, in 40 CFR part 60, Appendix A. A test shall consist of three runs, with each run at least 120 minutes in duration and each run collecting a minimum sample of 60 dry standard cubic feet. The average of the results of three test runs shall be used by the owner/operator for demonstrating compliance.

Clinker production shall be determined in accordance with the requirements found at 40 CFR 60.63(b). Results of each test shall be reported by the owner/operator as the average of three valid test runs. In addition to annual stack tests, owner/operator shall mon-

itor particulate emissions for compliance with the BART emission limits in accordance with the applicable Compliance Assurance Monitoring (CAM) plan developed and approved in accordance with 40 CFR part 64.

(i) For Ash Grove Cement, the emission rate of particulate matter shall be computed by the owner/operator for each run in pounds per hour (lb/hr).

(ii) For Holcim, the emission rate (E) of particulate matter shall be computed by the owner/operator for each run in lb/ton clinker, using the following equation:

$$E = (C_s Q_s) / PK$$

Where:

E = emission rate of PM, lb/ton of clinker produced;

C_s = concentration of PM in grains per standard cubic foot (gr/scf);

Q_s = volumetric flow rate of effluent gas, where C_s and Q_s are on the same basis (either wet or dry), scf/hr;

P = total kiln clinker production, tons/hr; and

K = conversion factor, 7000 gr/lb,

(g) *Recordkeeping for EGUs.* The owner/operator shall maintain the following records for at least five years:

(1) All CEMS data, including the date, place, and time of sampling or measurement; parameters sampled or measured; and results.

(2) Records of quality assurance and quality control activities for emissions measuring systems including, but not limited to, any records required by 40 CFR Part 75.

(3) Records of all major maintenance activities conducted on emission units, air pollution control equipment, and CEMS.

(4) Any other records required by 40 CFR part 75.

(5) All particulate matter stack test results.

(h) *Recordkeeping for cement kilns.* The owner/operator shall maintain the following records for at least five years:

(1) All CEMS data, including the date, place, and time of sampling or measurement; parameters sampled or measured; and results.

(2) All particulate matter stack test results.

(3) All records of clinker production.

(4) Records of quality assurance and quality control activities for emissions

measuring systems including, but not limited to, any records required by 40 CFR part 60, appendix F, Procedure 1.

(5) Records of all major maintenance activities conducted on emission units, air pollution control equipment, CEMS and clinker production measurement devices.

(6) Any other records required by 40 CFR part 60, Subpart F, or 40 CFR part 60, Appendix F, Procedure 1.

(i) *Reporting.* All reports under this section, with the exception of 40 CFR 52.1396(n) and (o), shall be submitted by the owner/operator to the Director, Office of Enforcement, Compliance and Environmental Justice, U.S. Environmental Protection Agency, Region 8, Mail Code 8ENF-AT, 1595 Wynkoop Street, Denver, Colorado 80202-1129.

(1) The owner/operator of each unit shall submit excess emissions reports for SO₂ and NO_x BART limits. Reports shall be submitted quarterly by the owner/operator for EGUs and semi-annually for cement kilns, no later than the 30th day following the end of each calendar quarter or semiannual period, respectively. Excess emissions means emissions that exceed the emissions limits specified in paragraph (c) of this section. The reports shall include the magnitude, date(s), and duration of each period of excess emissions, specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the unit, the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.

(2) The owner/operator of each unit shall submit CEMS performance reports, to include dates and duration of each period during which the CEMS was inoperative (except for zero and span adjustments and calibration checks), reason(s) why the CEMS was inoperative and steps taken to prevent recurrence, and any CEMS repairs or adjustments. The owner/operator shall submit reports quarterly for EGUs and semiannually for cement kilns.

(i) *For EGUs:* The owner/operator of each unit shall also submit results of any CEMS performance tests required by 40 CFR part 75 (Relative Accuracy Test Audits, Relative Accuracy Audits, and Cylinder Gas Audits).

(ii) *For cement kilns:* Owner/operator of each unit shall also submit results of any CEMS performance tests required by 40 CFR part 60, appendix F, Procedure 1 (Relative Accuracy Test Audits, Relative Accuracy Audits, and Cylinder Gas Audits).

(3) When no excess emissions have occurred or the CEMS has not been inoperative, repaired, or adjusted during the reporting period, the owner/operator shall state such information in the quarterly reports required by sections (h)(1) and (2) of this section.

(4) The owner/operator of each unit shall submit results of any particulate matter stack tests conducted for demonstrating compliance with the particulate matter BART limits in paragraph (c) of this section within 60 days after the completion of the test.

(5) The owner/operator of each unit shall submit semi-annual reports of any excursions under the approved CAM plan in accordance with the schedule specified in the source's title V permit.

(j) Testing requirements for Blaine County #1 Compressor Station:

(1) An initial performance test shall be conducted by the owner/operator for each engine for measuring NO_x emissions from the engines to demonstrate initial compliance with the emission limits. The initial performance test shall be conducted by the owner/operator as expeditiously as practicable, but no later than October 31, 2018.

(2) Upon change out of the catalyst for each engine a performance test shall be conducted by the owner/operator for measuring NO_x from the engines to demonstrate compliance with the emission limits and re-establish temperature and pressure correlations. The performance test shall be conducted by the owner/operator within 90 calendar days of the date of the catalyst change out.

(3) The performance tests for NO_x shall be conducted by the owner/operator in accordance with the test methods specified in 40 CFR Part 60, Appendix A. EPA Reference Method 7E shall be used to measure NO_x emissions.

(4) All tests conducted by the owner/operator for NO_x emissions must meet the following requirements:

(i) All tests shall be performed at a maximum operating rate (90 to 110 percent of engine capacity at site elevation).

(ii) During each test run, data shall be collected on all parameters necessary to document how NO_x emissions in pounds per hour were measured or calculated (such as test run length, minimum sample volume, volumetric flow rate, moisture and oxygen corrections, etc.). The temperature at the inlet to the catalyst and the pressure drop across the catalyst shall also be measured and recorded during each test run for each engine.

(iii) Each source test shall consist of at least three 1-hour or longer valid test runs. Emission results shall be reported as the arithmetic average of all valid test runs and shall be in terms of the emission limits (pounds per hour).

(iv) A source test plan for NO_x emissions shall be submitted to EPA at least 45 calendar days prior to the scheduled performance test.

(v) The source test plan shall include and address the following elements:

(A) Purpose of the test;

(B) Engines and catalysts to be tested;

(C) Expected engine operating rate(s) during test;

(D) Schedule/date(s) for test;

(E) Sampling and analysis procedures (sampling locations, test methods, laboratory identification);

(F) Quality assurance plan (calibration procedures and frequency, sample recovery and field documentation, chain of custody procedures); and

(G) Data processing and reporting (description of data handling and quality control procedures).

(k) Monitoring, recordkeeping, and reporting requirements for Blaine County #1 Compressor Station:

(1) The owner/operator shall measure NO_x emissions from each engine at least semi-annually or once every six month period to demonstrate compliance with the emission limits. To meet this requirement, the owner/operator shall measure NO_x emissions from each engine using a portable analyzer and a monitoring protocol approved by EPA.

(2) The owner/operator shall submit the analyzer specifications and monitoring protocol to EPA for approval

within 45 calendar days prior to installation of the NSCR unit.

(3) Monitoring for NO_x emissions shall commence during the first complete calendar quarter following the owner/operator's submittal of the initial performance test results for NO_x to EPA.

(4) The owner/operator shall measure the engine exhaust temperature at the inlet to the oxidation catalyst at least once per week and shall measure the pressure drop across the oxidation catalyst monthly.

(5) The owner/operator shall ensure that each temperature-sensing device is accurate to within plus or minus 0.75% of span and that the pressure sensing devices be accurate to within plus or minus 0.1 inches of water.

(6) The owner/operator shall keep records of all temperature and pressure measurements; vendor specifications for the thermocouples and pressure gauges; vendor specifications for the NSCR catalyst and the air-to-fuel ratio controller on each engine.

(7) The owner/operator shall keep records sufficient to demonstrate that the fuel for the engines is pipeline-quality natural gas in all respects, with the exception of the CO₂ concentration in the natural gas.

(8) The owner/operator shall keep records of all required testing and monitoring that include: The date, place, and time of sampling or measurements; the date(s) analyses were performed; the company or entity that performed the analyses; the analytical techniques or methods used; the results of such analyses or measurements; and the operating conditions as existing at the time of sampling or measurement.

(9) The owner/operator shall keep records of all deviations from the emission limit or operating requirements (e.g., catalyst inlet temperature, pressure drop across the catalyst) for each engine. The records shall include: The date and time of the deviation, the name and title of the observing employee and a brief description of the deviation and the measures taken to address the deviation and prevent future occurrences.

(10) The owner/operator shall maintain records of all required monitoring data, support information (e.g., all

calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required) and deviations from operating requirements for a period of at least five years from the date of the monitoring sample, measurement, or report and that these records be made available upon request by EPA.

(11) The owner/operator shall submit a written report of the results of the required performance tests to EPA within 90 calendar days of the date of testing completion.

(1) *Notifications.* (1) The owner/operator shall submit notification of commencement of construction of any equipment which is being constructed to comply with the SO₂ or NO_x emission limits in paragraph (c) of this section.

(2) The owner/operator shall submit semi-annual progress reports on construction of any such equipment.

(3) The owner/operator shall submit notification of initial startup of any such equipment.

(m) *Equipment operation.* At all times, the owner/operator shall maintain each unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

(n) *Credible evidence.* Nothing in this section shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with requirements of this section if the appropriate performance or compliance test procedures or method had been performed.

(o) *CFAC notification.* CFAC shall notify EPA 60 days in advance of resuming operation. CFAC shall submit such notice to the Director, Air Program, U.S. Environmental Protection Agency, Region 8, Mail Code 8P-AR, 1595 Wynkoop Street, Denver, Colorado 80202-1129. Once CFAC notifies EPA that it intends to resume operation, EPA will initiate and complete a BART determination after notification and revise the FIP as necessary in accordance with regional haze requirements, including the BART provisions in 40 CFR 51.308(e). CFAC will be required to install any controls that are required

as soon as practicable, but in no case later than five years following the effective date of this rule.

(p) *M2Green Redevelopment LLC notification.* M2Green Redevelopment LLC shall notify EPA 60 days in advance of resuming operation. M2Green Redevelopment LLC shall submit such notice to the Director, Air Program, U.S. Environmental Protection Agency, Region 8, Mail Code 8P-AR, 1595 Wynkoop Street, Denver, Colorado 80202-1129. Once M2 Green Redevelopment LLC notifies EPA that it intends to resume operation, EPA will initiate and complete a four factor analysis after notification and revise the FIP as necessary in accordance with regional haze requirements including the “reasonable progress” provisions in 40 CFR 51.308(d)(1). M2 Green Redevelopment LLC will be required to install any controls that are required as soon as practicable, but in no case later than July 31, 2018.

[77 FR 57915, Sept. 18, 2012]

Subpart CC—Nebraska

§ 52.1420 Identification of Plan.

(a) *Purpose and scope.* This section sets forth the applicable SIP for Nebraska under section 110 of the CAA, 42 U.S.C. 7401 *et seq.*, and 40 CFR Part 51 to meet NAAQS.

(b) *Incorporation by reference.* (1) Material listed in paragraphs (c) and (d) of this section with an EPA approval date prior to July 1, 2009, was approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Material is incorporated as it exists on the date of the approval, and notice of any change in the material will be published in the FEDERAL REGISTER. Entries in paragraphs (c) and (d) of this section with EPA approval dates after July 1, 2009, will be incorporated by reference in the next update to the SIP compilation.

(2) EPA Region 7 certifies that the rules/regulations provided by EPA in the SIP compilation at the addresses in paragraph (b)(3) of this section are an exact duplicate of the officially promulgated State rules/regulations which